LAND RECLAMATION COMMISSION

STATE OF MISSOURI
P.O. BOX 176
JEFFERSON CITY, MISSOURI 65102
573-751-4041

Permit To Engage in Surface Mining

LAND RECLAMATION COMMISSION

ISSUES TO

JOPLIN STONE COMPANY

Pursuant to "The Land Reclamation Act," RSMo, 2001, and on conformity with the statements In the application, a permit is hereby granted to engage in surface mining of limestone in the state of Missouri. The extent of the Proposed mining operation(s) will be on 100 acres, more or less.

The locations of the operation(s) under this permit is/are as follows: Renewal

County	Section	Township	Range	Acres Renewed	Acres New	Total Acres	Site/Stream Name	Site Number
Jasper	26	28N	32W	100	0	100	Joplin Stone	0863

This permit may be suspended or revoked upon violation of any or all of the conditions set forth in "The Land Reclamation Act," RSMo. 2001, or in such rules and regulations as are promulgated pursuant thereto by the Land Reclamation Commission.

IN WITNESS WHEREOF I have hereunto set my hand this 13th day of August 2004

Tom Cabanan for Larry Coen

DIRECTOR OF STAFF
Land Reclamation Commission

Permit No. 0124
Effective Date 09/01/2004
Expiration Date 08/31/2005

MO 780-1122 (6-95)

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MISSOURI LAND RECLAMATION COMMISSION

MISSOURI DEPARTMENT OF NATURAL RESOURCES
LAND RECLAMATION COMMISSION

PERMIT RENEWAL FOR INDUSTRIAL MINERAL MINES

P.O. BOX 176
JEFFERSON CITY, MO 65102-0176

NAME OF CORPORATION, COMPANY, PARTNERSHIP OR INDIVIDUAL		DATE
JOPLIN STONE COMPANY		July 28, 2004
ADDRESS	**CITY**	**STATE** / **ZIP CODE**
4378 County Road 190	JOplin	MO / 64801
CONTACT PERSON		**TELEPHONE NUMBER**
Damian Griesemer / David R. Holberg (417-874-1400)		417-673-1114

FEES: COMPLETE SECTION I OR SECTION II

SECTION I. Fees: Open pit operators and those mining more than 5,000 tons of sand and/or gravel:

1. To compute the site fee complete the information below:

SITE NAME OR NUMBER (add a separate sheet for additional sites)	**Mark each month that the site will be operated during the permit year**	For sites operated less than six months per permit year pay **$150** For sites operated six months or more per permit year pay **$300**
1. Joplin Stone Co. #124	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$300.00
2.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
3.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
4.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
5.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
6.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
7.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
8.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
9.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
10.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	$
TOTAL SITE FEE →		$300.00

2. Acreage Fee $5 X 100 **number of acres bonded** $500.00

3. Annual Permit Fee ..... **$ 500**

4. Total Fee (Add totals from 1, 2 and 3) $1,300.00

NOTE: If Total Fee exceeds $2,500.00 then pay only ..... **$ 2,500**

SECTION II. FEES: Sand or gravel operators mining less than 5,000 tons per year:

1. Annual Permit Fee ..... **$ 300**

SIGNATURE OF APPLICANT	TITLE	DATE
	Special Projects	7/28/04

Appeared before me this 28th day of July, 2004, David R. Holberg to me personally known, who executed the above as their free acts and deeds.

NOTARY PUBLIC EMBOSSED SEAL: SALLY A. MATTHEWS NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

STATE OF	COUNTY (OR CITY OF ST. LOUIS)
Missouri	Greene
SUBSCRIBED AND SWORN BEFORE ME, THIS 28th DAY OF July YEAR 2004	USE RUBBER STAMP IN CLEAR AREA BELOW.
NOTARY PUBLIC SIGNATURE: Sally A. Matthews / MY COMMISSION EXPIRES: 7-5-05	SALLY A. MATTHEWS Notary Public Christian County State of Missouri My Commission Expires July 5 2005
NOTARY PUBLIC NAME (TYPED OR PRINTED): Sally A. Matthews	

FOR DEPARTMENT USE ONLY: APPROVED BY	DATE APPROVED	PERMIT NUMBER	EXPIRATION DATE
	8/1/04	0124	8/31/2005

MO780-1780 (12-02)

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LAND RECLAMATION COMMISSION

SITE INFORMATION FORM

LONG TERM MINE PLAN 8/22/95

To be completed for each separate area of disturbance associated with mining operations.

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SITE NAME OR NUMBER	PERMIT NUMBER
JOPLIN STONE COMPANY	124

COMPANY NAME: JOPLIN STONE COMPANY

COUNTY	1/4 SECTION	SECTION
JASPER		26 & 27
TOWNSHIP	**RANGE**	**ACRES**
28N	32W	577

RIVER OR STREAM NAME (FOR IN-STREAM ACRES):

MINERAL COMMODITY	ESTIMATED TONS/YEAR (FOR GRAVEL SITES)
Limestone	

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE): JOPLIN STONE COMPANY

ADDRESS: ROUTE 1 BOX 107

CITY	STATE	ZIP CODE
JOPLIN	MO	64801

SOURCE OF RIGHT TO MINE (CHECK ONE):

- ☐ MINERAL DEED
- ☐ LEASE
- ☒ WARRANTY DEED
- ☐ VERBAL AGREEMENT
- ☐ OTHER (DESCRIBE):

DATE OF AGREEMENT: Various Tracts

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE): JOPLIN STONE COMPANY

ADDRESS: ROUTE 1 BOX 107

CITY	STATE	ZIP CODE
JOPLIN	MO	64801

SOURCE OF RIGHT TO MINE (CHECK ONE):

- ☐ MINERAL DEED
- ☐ LEASE
- ☒ WARRANTY DEED
- ☐ VERBAL AGREEMENT
- ☐ OTHER (DESCRIBE):

DATE OF AGREEMENT: Various Tracts

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

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LAND RECLAMATION COMMISSION

MINE PLAN

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P.O. BOX 176
JEFFERSON CITY, MO 65102

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE: DECEMBER 31, 2066

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

The Joplin Stone Co. site is located on a ridge of Missippian Age Limestone that has a Northwest\Southeast trend, with an overall westward regional dip. The is site situated along the Northeast boundary of the historic Tri-State Lead and Zinc Mining district in Jasper County . This site was baren of mineable lead and zinc and the limestone beds were sufficiently solid that the old mineral mines that initially pumped mine water in the direction of this site reported that it returned to the mines as fast as it was pumped. Consequently mine waters were thereafter pumped to the southwest. The land use has generally been pasture with some small tilled areas. Small trees, hedge rows, and brush are visible features consistent with current land use. The site is typical of most farmland in the area, with less than 18" topsoil, rocky subsoil, and pinacle rock formations projecting upward from the bedrock into the subsoil. Stock water is available from shallow wells, and potable drinking water is available from wells into deeper state approved aquifers.

OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.

A. TOPSOIL

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

Topsoil varies to 18" typically less than 12" INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☒ YES OR ☐ NO limited amounts may be sold but most will be re-applied

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Topsoil removal is with mechanical equipment. Motorized scrapers, excavators, loaders, graders, dozers,and tractors are used to manipulate and load the topsoil. This equipment and trucks are used to transport topsoil to prepared and backfilled areas, or to stockpiles for storage. Limited amounts of topsoil may be sold for use off site.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Topsoil excavation will be scheduled as much as possible so that the topsoil can be spread and applied to graded backfilled areas as a single operation. However, when this preferred method is not compatable with operating needs or weather conditions, topsoil will be placed in compact stockpiles for future removal and rehandling. These stockpiles will be pushed up and trimmed so as to minimize wind and water erosion. If the stockpile is to remain longer that 1 year it will be seeded with a temporary cover grass. Small retention berms will be used if needed to collect siltation from runoff. Good stewardship of topsoil is practiced , therefore, topsoil is placed in final topography prior to seeding on a 12 month cycle , provided weather conditions permit . Any remaining stockpiles of topsoil will be seeded to the same standards as reclaimed land within 12 months following the permit expiration. The development of the pit depression creates internal control of runoff from graded areas, therefore siltation control ponds and devices will seldom be used as a regular operating practice.

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B. SPOIL

DESCRIBE METHODS AND LOCATION OF SPOIL PLACEMENT AND DISPOSAL

After topsoil removal, the subsoil is excavated using all manner of mechanical equipment. The subsoil is transported to areas where reclamation as grassland is planned, generally consisting of previously mined areas along the pit highwall. This subsoil and other spoil is contoured and graded with mechanical equipment so as to provide for slopes that can be topsoiled , seeded, and , mowed . Some spoil may be pushed over highwalls into the pit.Excavation of channel fill between the pinacle rocks is generally by use of a backhoe, and mechanical breaker. Sometimes overburden is blasted prior to excavation. Pinacle rock is removed mechanically or by blasting. The pit created by open pit mining is typically 50 to 60 feet deep. Overburden seldom exceeds 15 feet. Final site development will result in a substantial pit depression with sloped sides. The spoil will be used to create the sloped sides of the depressed area. The depressed pit area will have rock floor and be suitable as an industrial site or water impoundment. Graded backslopes will have 3:1 slopes or less. Grading and leveling of spoil is ongoing as mining proceeds. Final grading of any spoil will be completed within 24 months following the permit expiration

C. ACID MATERIALS

DESCRIBE METHODS AND EQUIPMENT USED FOR HANDLING ACID MATERIALS (IF NONE IS ANTICIPATED, WRITE "NONE" BELOW)

The warsaw limestone strata that is mined from the site is one of the purer limestones in the State of Missouri, having a Calcium Carbonate equilivalent of over 95% . In spite of its purity some intrusive shales are present which contain small pirite nodules. These nodules probably are acid forming but, in the presense of high calcium dust and rock (a result of blasting and excavation) the acid effect is midigated. No other known acid forming materials are apparent. The pirite nodules are quite rare, somewhat resembling gold nuggets, and some employees like to collect them. Sometimes months go by without any nodules being found.

D. PIT INFORMATION (GIVE ALL DIMENSIONS IN FEET)

DESCRIBE LOCATION AND ORIENTATION OF PIT, IF NOT CLEAR ON SITE MAPS

Nearly 50' of rock will be excavated in the pit areas resulting in depressed topography.Setbacks along roads will be as allowed under the Land Reclamation Act. Overburden will be placed along the highwall so as to create a sloped edge to the bottom of the pit area. The pit floor will be utilized as an industrial area or as a water impoundment. Islands of overburden are may be located in the central pit area. In-as-much as the land is company owned, future value is created by good reclamation. The ultimate land use following mining is uncertain but the site could be used for residential, farming, or industrial purposes. During stripping operations, overburden is placed alongside existing backfilled areas and highwall. The overburden is graded to 3:1 slopes with dozers and other grading equipment as weather allows. Topsoil placement follows in sequence, with seeding and planting following.Topsoil placement is performed as much as possible with one movement from excavation to final placement. Where weather or other site conditions will not allow this schedule, Topsoil will be inventoried in temporary stockpiles. Annually, unless weather or other constraints prevent seeding, sufficient topsoil is placed to provide for seeding equivalent to one year's stripping activity.

YES	NO	
☐	☒	Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?
☐	☒	Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right of way, and in no case may the excavation be closer to the right of way than fifty feet or twenty-five feet plus one and one-half (1-½) times the depth of unconsolidated material whichever is greater, unless a variance is granted by the Commission.)
☒	☐	Will any excavation start at or within fifty feet (50') of any property line? (NOTE: If the answer is "yes", a safety barrier may be needed.)

(OK)

11-9-95 talked with David Holberg & he said he would construct a safety barrier — He will also fax me a letter addressing this issue M.D.

See letter from David Holberg 11-10-95 - attached

RECLAMATION PLAN - 10 CSR 40-10.020(2)(D)2.

A. REVEGETATION (Attach additional sheets, if needed)

REVEGETATION MIX #1	PURPOSE OR LAND USE	B. SEEDING OR PLANTING TIME
Fescue	Grassland	Fall

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

The revegetation operation will in some instances involve the application of aglime and fertilizer.Temporary seeding may be used to establish ground cover. Permanent revegetation will include planting of fescue or other grass mixture in accordance with good farming practices at times suitable for achieving good germination and plant growth. Generally the best success has been achieved with fescue seeded using a hydroseeder application. Mulch and other binders may be used and applied thru the hydroseeder. Other conventional seeding methods may be utilized. Regardless of method, timely revegitation resulting in reclaimed land that closely resembles existing undisturbed ajoining grassland is the standard proposed for this site.

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

SEEDED SPECIES	POUNDS/ACRE	TREE OR SHRUB SPECIES	STEMS/ACRE
Fescue	30 lbs/acre		

REVEGETATION MIX #2	PURPOSE OR LAND USE	B. SEEDING OR PLANTING TIME

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Revegetation is scheduled to follow topsoil placement, with the typical planting time being during the fall. The generally slopes drain into the pit and the topsoil replacement depth is generally greater than existed before mining. The best results have been achieved with fall hydroseeding. this program has resulted in bond release of 12 acres in 1995.

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

SEEDED SPECIES	POUNDS/ACRE	TREE OR SHRUB SPECIES	STEMS/ACRE

ATTACH ADDITIONAL SHEETS FOR ADDITIONAL SEED MIXES.

B. GRADING

DESCRIBE PROPOSED RECLAIMED TOPOGRAPHY, INCLUDING SLOPES

Reclaimed topography will create a sloped transition from existing topography that borders the site to the depression created by the removal and sale of the limestone strata. Generally these slopes will be 3:1 or less with sufficient setbacks to allow for an internal circumferential road at the upper elevation. Final land use of the depressed area may be for industrial uses ,however, water impoundment in one or more lakes will be possible. The choice will probably not be made until the last year or two of mining activity. The company owns these lands and considers it to be in its best interest to maximize future land value by means of careful mining and thorough reclamation.

C. DESCRIBE THE GENERAL SEQUENCE AND TIMING OF THE FOLLOWING ACTIVITIES

GRADING

Grading is performed as overburden is transported from intitial excavation to final placement, in one continuous operation as much as possible. Trimming and contouring follow so as to make topsoil application easier. This operation occurs annually is seasonal cycles so as to provide a reasonable inventory of stripped rock for mining purposes.

within the time schedule outlined in 10CSR 40-10.050(10)
11-9-95

REPLACEMENT OF TOPSOIL

Topsoil replacement is performed in one operation from intitial stripping to final placement whenever possible. When weather or other conditions prevent this , topsoil is temporarily inventoried in stockpiles. Final application places topsoil over graded spoil in preparation for revegetation. This process also occurs annually in season cycles.

within the time schedule outlined in 10 CSR 40-10.050(10)
11-9-95

REVEGETATION

Revegetation involves seedbed preparation, seeding, mulching, watering (if appropriate) , fertilization and liming (if required to achieve adequate cover density), and re-seeding, mowing, erosion control of minor erosion channels using straw dikes or other suitable methods, so that permanent grass cover is provided for all areas not reclaimed to Industrial or water impoundment uses. This farming process is ongoing annually and is seasonal.

AVERAGE DEPTH OF REPLACED TOPSOIL (INCHES)

12 inches

D. USE OF LAND WHEN RECLAIMED Estimate acreage of each land use below, after reclamation	ESTIMATED ACRES:
Wildlife (forest or other habitat with livestock excluded)	
Agricultural (pasture, cropland, and horticultural)	100
Development (residential, industrial, and recreational)	427
Water impoundments (for wildlife, agricultural, or development) (OPTIONAL TO DEVELOPMENT)	50

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RECLAMATION COMMISSION

By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.

2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Sections 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.

3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.

4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

SIGNATURE OF APPLICANT	TITLE	DATE
Louis C Greiemer	President	8-23-95

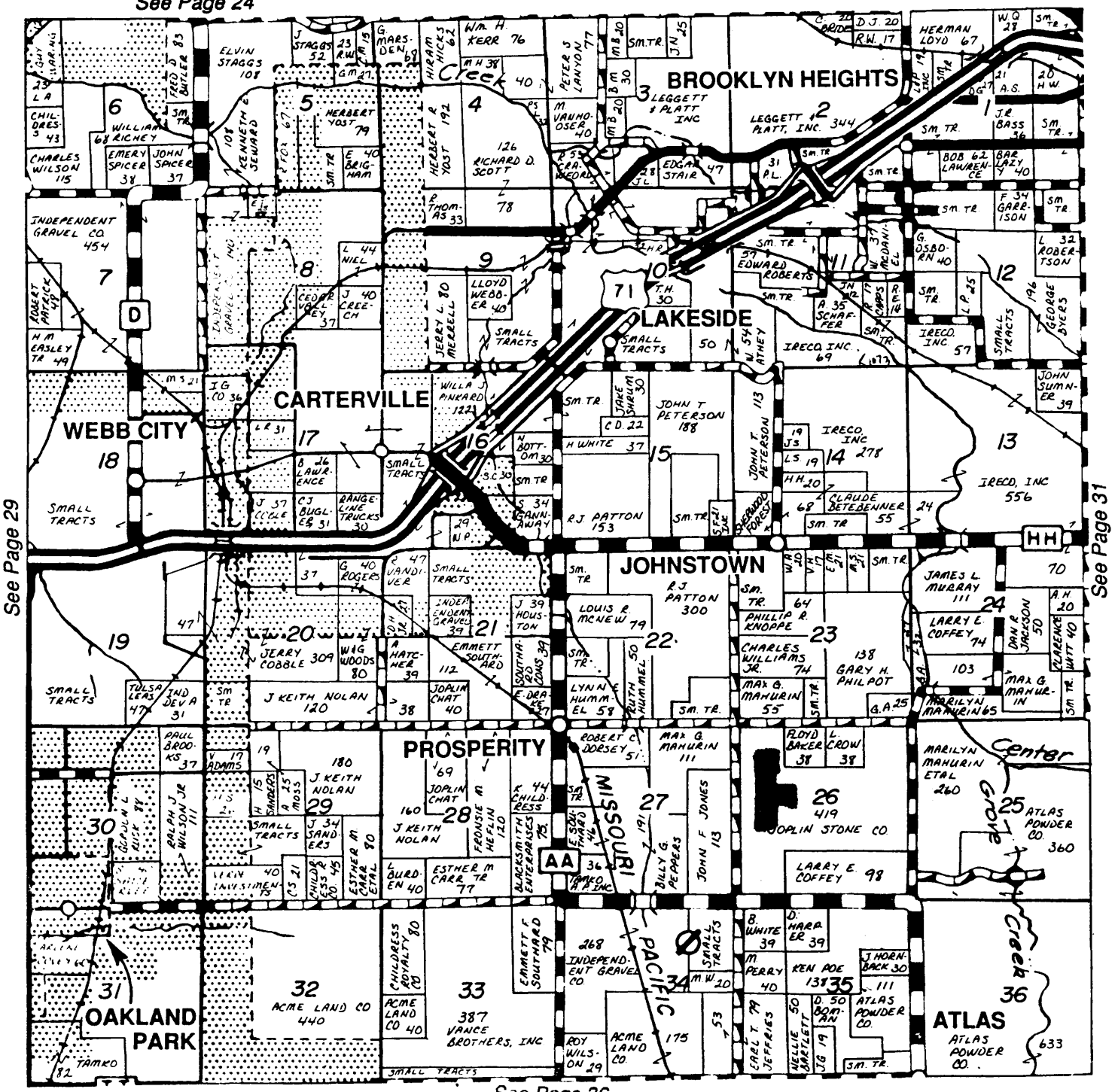
NOTARY PUBLIC EMBOSSER SEAL	STATE	COUNTY (OR CITY OF ST. LOUIS)
	Missouri	Greene
	SUBSCRIBED AND SWORN BEFORE ME, THIS 23rd DAY OF August 1995	USE RUBBER STAMP IN CLEAR AREA BELOW
	NOTARY PUBLIC SIGNATURE: Sally A. Matthews — MY COMMISSION EXPIRES: 7-5-97	
	NOTARY PUBLIC NAME (TYPED OR PRINTED): Sally A. Matthews	

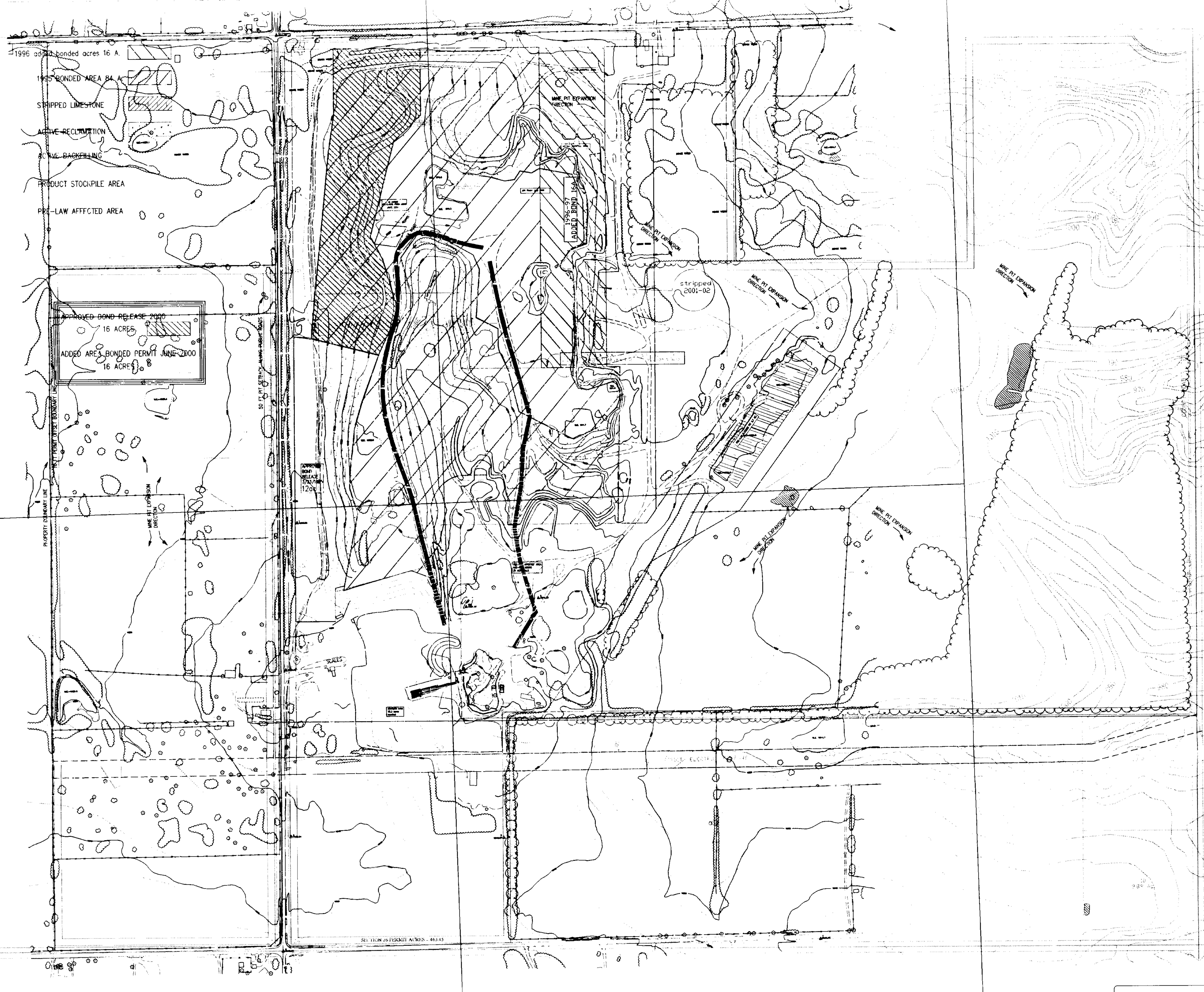
APPROVED BY (DIRECTOR'S REPRESENTATIVE)	DATE APPROVED	PERMIT NUMBER
Mohan Dhakli	11-17-95	124

Joplin Stuff

TOWNSHIP 28N. RANGE 32W

See Page 24





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NOTE: THE BASE MAP HAS BEEN OVERLAYED WITH A DIGITAL TOPOGRAPHIC MAP PREPARED FROM PHOTOGRAPHY FLOWN IN NOVEMBER 2001 MINOR VARIATIONS IN TOPO LINES ARE DUE TO ENGININEERING STANDARDS UPGRADES

JOPLIN STONE CO.

4378 COUNTY ROAD 190 · JOPLIN, MISSOURI 64801 · DNRC PERMIT 124 · DRH

7/15/02 MAP SUPPLEMENT TO APPLICATION DATED 8/22/1995 FOR PERMIT THRU 8/31/2007

APPLICATION FOR PERMIT RENEWALL AUGUST 2001	1" = 330 FT
NO ADDED ACRES UNDER BOND	MAP REVISED AS OF 7/15/02
STATUS OF MINING AND RECLAMATION ESTIMATED BY FIELD INSPECTION- ANNUAL AIR TOPO UPDATE IN NOV.	O: \JOPLIN\DNRL-8-2002a.DWG